



Appl. No. 09/816,324

AMENDMENTS TO THE CLAIMS

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)

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5. (Currently Amended) An image encoding device comprising:  
an image signal input circuit receiving an image signal and  
dividing the image signal into macroblocks to generate block-  
divided image signals;  
an image encoding circuit encoding the block-divided image  
signals output from the image signal input circuit, and outputting  
encoded image signals to a transmission path;  
an encoded region designator designating regions to be encoded  
by the image encoding circuit according to a bit rate of the  
transmission path;  
wherein said image encoding circuit encodes only those regions  
which are designated by said encoded region designator;  
wherein said encoded region designator receives the bit rate  
of the transmission path and a motion vector detected by said image  
encoding circuit, and designates the encoded regions based on them;  
a motion vector converter receiving the motion vector and  
converting the motion vector into a horizontal motion vector value

and a vertical motion vector value;

a first comparator comparing the horizontal motion vector value to a first threshold;

a second comparator comparing the vertical motion vector value to a second threshold; and

a logical OR circuit receiving comparison results from said first and second comparators,

wherein the first and second thresholds are based on the bit rate of the transmission path, and

wherein the comparison results are true when the respective motion vector value is greater than the respective threshold such that only those macroblocks having a motion vector value exceeding a respective one of the thresholds are designated by said encoded region designator.

6. (Previously Presented) The image encoding device as set forth in claim 5,

said image encoding circuit including a region selector selecting which regions of the block-divided image signals are to be encoded and which are not to be encoded and;

said region selector being controlled by said encoded region designator such that only those macroblocks designated by said encoded region designator are selected by said region selector for encoding by said image encoding circuit.

7. (Currently Amended) An image encoding device comprising:

an image signal input circuit receiving an image signal and dividing the image signal into macroblocks to generate block-divided image signals;

an image encoding circuit encoding the block-divided image signals output from the image signal input circuit, and outputting encoded image signals to a transmission path;

an encoded region designator designating regions to be encoded by the image encoding circuit according to a bit rate of the transmission path;

wherein said image encoding circuit encodes only those regions which are designated by said encoded region designator;

wherein said encoded region designator receives the bit rate of the transmission path and region information indicating boundaries of a region and designates the encoded regions based on them;

an address decoder receiving the region information and the bit rate of the transmission path, said address decoder setting horizontal and vertical start/end positions of the designated region to be encoded according to the bit rate of the transmission path;

a first comparator comparing the horizontal start/end

positions against a horizontal macroblock count;

a second comparator comparing the vertical start/end positions against a vertical macroblock count; and

a logical AND circuit receiving comparison results from said first and second comparators,

wherein the comparison results are true when the respective macroblock counts are between the corresponding start and end positions.

8. (Previously Presented) The image encoding device as set forth in claim 7,

said image encoding circuit including a region selector selecting which regions of the block-divided image signals are to be encoded and which are not to be encoded ~~and~~; and

said region selector being controlled by said encoded region designator such that only those macroblocks designated by said encoded region designator are selected by said region selector for encoding by said image encoding circuit.

9. (Cancelled)

10. (Previously Presented) An image encoding device comprising:

an image signal input circuit receiving an image signal and dividing the image signal into macroblocks to generate block-

divided image signals;

an image encoding circuit encoding the block-divided image signals output from the image signal input circuit, and outputting encoded image signals to a transmission path;

a first encoded region designator receiving a bit rate of the transmission path and a motion vector detected by said image encoding circuit, and designating a first encoded region based on the bit rate of the transmission path and the motion vector;

a second encoded region designator receiving the bit rate of the transmission path and region information, and designating a second encoded region based on the bit rate of the transmission path and the region information;

wherein said image encoding circuit encodes only those regions which are designated by both said first and second encoded region designators.

11. (Previously Presented) The image encoding device as set forth in claim 10, further comprising:

a logical AND circuit performing a logical AND function between the first and second designated encoded regions.

12. (Previously Presented) The image encoding device as set forth in claim 10, further comprising:

a bit selector limiting the number of bits per pixel of the

image signal to be encoded by the image encoding circuit according to a bit rate of the transmission path

13. (Previously Presented) The image encoding device as set forth in claim 12, said bit selector including:

a bit number determining circuit receiving the bit rate of the transmission path and determining the number of most significant bits per pixel of the image signal according to the bit rate of the transmission path; and

a selector receiving the block-divided image signals and selecting the determined number of most significant bits per pixel from the block-divided image signals,

wherein the number of most significant bits per pixel varies according to the bit rate of the transmission path.

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)